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ABSTRACT

As hiring processes have increasingly moved online, having better digital skills could play an important role in successful job seeking. However, digital inequality suggests that people use the Internet in different ways with varying levels of skills raising questions about who is most likely to be able to search for jobs online, including on social media. This paper examines online job searching, including the role of digital job-search skills in the process. Results show that sociodemographic characteristics (i.e., age, race, education, and income) as well as online experiences, being a social media user, and having higher digital job-search skills relate to online job-seeking behaviors. These findings highlight the presence of digital inequalities in online job searching including differences by social media experiences.

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Introduction

While large portions of the population have become social media users, people vary widely in how they use such platforms (Correa, 2016; Hargittai & Hsieh, 2010; Micheli, 2016; Pearce & Rice, 2017; Smock et al., 2011). The theory of digital inequality suggests that differences in access and use will manifest themselves along sociodemographic factors such as age, gender, and socioeconomic status (Bonfadelli, 2002; DiMaggio et al., 2004; Selwyn, 2004; Warschauer, 2002). Research focusing on social media use has found, across different national contexts, that user background is related to platform adoption, that is, certain types of people are more likely to join social network sites than others (Blank & Lutz, 2017; Hargittai, 2020; Koiranen et al., 2019). Given that social media may play a helpful role in the job-search process, considering differentiated social media use is important when looking at how online job-searching behavior may differ across the population (Burke & Kraut, 2013).

One important factor related to whether someone uses social media is Internet skills (Hargittai, 2020). Those with higher skills are more likely to leverage the Internet for capital-enhancing activities than those reporting lower levels of know-how (Hargittai & Hinnant, 2008; van Deursen et al., 2017). While some people are better at making

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use of online tools, others may benefit less based on their lower digital skills putting them at a disadvantage in a digitized world (e.g., Manroop & Richardson, 2013). One of the important ways in which this inequality in skills may manifest itself is how people use the Internet, and social media in particular, for job search, which is the focus of this paper.

Job search is a complex and demanding effort (Wanberg et al., 2020). Along with the difficulties faced during the job-search process such as significant economic losses and mental health issues (Brand, 2015; Moore et al., 2017; von Wachter, 2010), job seekers also need to juggle different job-search channels. Studies suggest that job seekers increasingly turn to online resources to search for employment and around 70% engage in online job searching (Jobvite, 2020; Sakurai & Okubo, 2017; Smith, 2015). Using the Internet for job seeking improves the speed with which people find jobs, offering a significant benefit (Kuhn & Mansour, 2014). Traditional job-seeking methods such as newspaper ads are increasingly shifting to the Internet (Green et al., 2012), making online job seeking increasingly important for finding employment.

There is a great variance in who uses the Internet for job seeking (Feldman & Klaas, 2002; Garg & Telang, 2018; Green et al., 2012; Puckett & Hargittai, 2012), but we know less about how this may vary on social media in particular. The importance of turning to one's social networks as a source of information for career opportunities has been long established (Granovetter, 1973; Ioannides & Datcher Loury, 2004) and given that so much of what people do on social media is to connect with others, such platforms may provide significant means for job seekers to leverage their social networks. Yet, surprisingly little work has examined who uses social media for job searching (Burke & Kraut, 2013 and; Gee et al., 2017 are rare exceptions).

The Internet and job searching

To understand variations in Internet use for job seeking, scholars have researched how differences in sociodemographics (Green et al., 2012; Puckett & Hargittai, 2012), Internet access and previous experiences with online technologies (Beard et al., 2012; Feldman & Klaas, 2002), and use of social network sites for professional purposes (Gandini & Pais, 2018; Garg & Telang, 2018) relate to online job seeking. Studies in the United States have shown that ethnic and racial minority groups (i.e., African American, Latinx, and Asian Americans) are more likely to search for job- and career-related information online compared to white Americans (Kuhn & Mansour, 2014; Puckett & Hargittai, 2012; Stevenson, 2009), but these minority groups are also most disadvantaged when it comes to having reliable Internet access (Mossberger et al., 2012). A survey of almost 19,000 U.K. job seekers has also shown differences in online job search by race and ethnicity, with Asian and Asian-British job seekers being less likely to use the Internet for job seeking compared with whites (Green et al., 2012). Online job searching decreased with age and increased with educational attainment (Green et al., 2012). The common theme across these studies is that racial and ethnic minorities are more likely to take advantage of online job-search options.

Most existing studies of online job searching gathered their data before social media had gone mainstream and thus cannot account for how the rise of social media may have become relevant for job searching (Piercy & Lee, 2019). Additionally, most of

these studies did not consider the role of digital job-search skills in the process. Yet, in a study of college students' job-seeking experiences, Puckett and Hargittai (2012) found that those with higher-level Internet skills were more likely to use the Internet for seeking information about jobs suggesting that this is a domain worth further inquiry. However, they did not have any measures specifically related to job-search skills, a gap this paper is able to address. The following sections review the literature on the potential role of social media for job searching, as well as the relevance of digital job-search skills.

Theorizing the role of social media in the job-search process

Drawing on people in one's social network has been considered one of the most effective job-search strategies (Granovetter, 1973; Van Hoye et al., 2009). It can be advantageous due to the possibility of accessing varied types of information that are not shared through formal channels (Obukhova & Lan, 2013; Trimble & Kmec, 2011) especially if the seeker utilizes weak ties, i.e., acquaintances, as compared to strong ties such as one's close friends and family (Granovetter, 1973). Strategic networking provides increased chances of reemployment through personal contacts (Weber & Mahringer, 2008), and a greater likelihood of receiving prestigious, high-paying and good-fit job offers (Dustmann et al., 2016; Marmaros & Sacerdote, 2002). Although research on heterogeneous effects of network-based job-search for different sociodemographic groups has shown racial disparities in the usefulness of one's social ties during the job-search process, network-based job applications in general generate more job offers compared to formal search methods, highlighting its effectiveness as a job-search strategy (Pedulla & Pager, 2019).

With the emergence of social network sites, professional networking has also expanded to the online environment. In line with their missions of creating an online content-sharing community, these platforms connect users to their friends and acquaintances (boyd & Ellison, 2007). In the context of career building and job search, when compared to ordinary online job portals, these platforms (e.g., LinkedIn) offer additional tools allowing users to get in touch with others 'they may want to know or need to know' (van Dijck, 2013, p. 210) while building on their existing connections. For instance, user profiles can work like expanded online resumes (Kluemper, 2013), revealing interests and social ties in addition to information included in one's regular resume prepared for a specific job application.

Some research has explored why people turn to social media for career purposes (Brouer et al., 2015; Burke & Kraut, 2013; Gandini & Pais, 2018; Kelkar & Kulkarni, 2013; Nikolaou, 2014). Professional social network sites like LinkedIn allow for gaining diverse information about organizations (Brouer et al., 2015), and as such they enable job seekers to communicate with professional contacts and discover career opportunities (Van Hoye et al., 2009). Recruiters utilize these same sources to approach job applicants or potential employees, creating the opportunity of being contacted by a recruiter through social media (Gandini & Pais, 2018).

Work-related networking is not limited to social media platforms that market themselves as focusing on that type of interaction. ln general, people use different social network sites for different purposes, such as Facebook for personal self-presentation and LinkedIn for professional self-promotion (van Dijck, 2013). Yet, nonprofessionally-oriented platforms may also be used during the job-search process (Burke & Kraut,

2013). On more general platforms like Facebook, user profiles carry an opportunity for reaching a wider audience through interactions (e.g., comments and likes) and discovering broader opportunities for career advancement (Burke & Kraut, 2013). As opposed to one-on-one interactions happening in a void, the visibility of interaction and social ties on these platforms (boyd & Ellison, 2007) provides an alternative way to expanding one's social circle. Additionally, social media offer connections through interests and affiliations (e.g., Facebook Groups devoted to hobbies or alumni connections) that allow networking with people beyond a focused interest on a particular job position. Company Facebook Pages can be important resources for job seekers to learn about new career opportunities (Kelkar & Kulkarni, 2013). All of these aspects of social media suggest that such services are more versatile resources than websites listing job vacancies, and differentiate social network site use for job search from regular job-search portals.

People's experiences with social network sites for professional purposes vary (Sharone, 2017), and certain people may self-select into these platforms. For instance, younger individuals and women are more likely to adopt Facebook while high-income individuals are more likely to use LinkedIn (Blank & Lutz, 2017; Hargittai, 2020), and personal interests have been shown to play a role when it comes to Twitter use (Hargittai & Litt, 2011). Given differentiated social media adoption (Hargittai, 2007; Pearce & Rice, 2017), whether people use such resources as a tool to reach out to one's social networks during the job-search process is an open question. Previous work has shown that younger jobseekers use Facebook more extensively for job search compared to older job-seekers who tend to use LinkedIn (Nikolaou, 2014). In this paper, we specifically focus on social media use as a job-search strategy, and examine who exactly is most likely to utilize these resources and what skills may be related to using social media for job searching.

Digital job-search skills

Digital inequality theory suggests that people differ in their digital skills, which can explain differences in the online practices of individuals (Hargittai & Hinnant, 2008; van Deursen et al., 2017). As it is with other capital-enhancing activities (Hargittai & Hinnant, 2008), online competencies are central to utilizing tools and platforms for online job search (Feuls et al., 2016). People's engagement with various online activities during their unemployment – such as using email or social media, finding and evaluating sources, networking and self-promotion – have been shown to differ depending on Internet skill levels (Feuls et al., 2016). Research has also shown that Internet skills affect users' online job-seeking behaviors, and greater general Internet skills lead to more engagement with the Internet for job-seeking purposes (Puckett & Hargittai, 2012).

Acquisition of digital job-search skills might be of concern in the context of social media as well. For instance, an interview study of 29 recent human resource management graduates identified digital skill-set deficit or lack of know-how as one of the emerging themes in using social media for job seeking, showing that some interviewees were unaware of social media features related to job search (e.g., job tab on LinkedIn) and thus not necessarily able to exploit online resources to look for career opportunities (Manroop & Richardson, 2013). Given the study's focus on a very specific population group, while helpful for highlighting the importance of a certain skill-set for utilizing social media for job seeking, it is impossible to generalize findings from it to a broader population.

Theoretically speaking, there is a good chance that job-search skills such as going online to find vacancies and using a social media profile to highlight employment skills may be relevant to online job searching. Following past literature on digital inequality and online job seeking (Garg & Telang, 2018; Green et al., 2012; Puckett & Hargittai, 2012; van Deursen et al., 2017), it is also likely that sociodemographics and Internet experiences relate to online job-search behaviors, including social media use for job searching. This paper then empirically examines how digital job-search skills relate to online information-seeking for jobs as well as applying for jobs using online tools, including social media. The paper's research questions are as follows:

RQ1: Considering sociodemographics and Internet experiences, who is more likely to (a) look for information about jobs online; and (b) apply for a job online?

RQ2: Considering sociodemographics and Internet experiences, among social media users, who is more likely to (a) look for job information using social media; and (b) apply for a job found through social media?

RQ3: Do digital job-search skills, besides sociodemographics and Internet experiences, relate to looking and applying for jobs using online tools, including social media?

Data and methods

To examine who engages in online job-search activities, we analyze a U.S. national data set administered by the Pew Research Center in 2015 (Pew Research Center, 2015). The survey asked a wide range of questions regarding job-search behavior online. To reach a national sample of adults living in the United States, the study relied on random-digit-dial sampling, and the survey was administered using both landline and cellphone numbers (Smith, 2015). The total sample consisted of 2001 adults aged 18 and older. We restrict the analyses to 1740 Internet users, based on whether respondents answered 'Yes' to at least one of the following two questions: 'Do you use the Internet or email, at least occasionally?' and 'Do you access the Internet on a cell phone, tablet or other mobile handheld device, at least occasionally?' We recognize that by doing so, we are already selecting on a more privileged population that is already using the Internet. The implications of this for our findings are that any inequalities we identify in response to RQ1 and RQ2 would likely be even greater were non-users included. Given our focus on online job search, we also restrict the analyses to those who are in the labor force, thus excluding 481 respondents who are retired or disabled (see 'Sociodemographics' for how we measured work status). After omitting respondents with missing data on relevant variables for our analyses, the final sample consists of 1000 Internet users who are currently in the labor force. For our analyses regarding social media job-searching behavior, the sample is further restricted to 799 social media users, as the questions in this context are only asked of social media users.

Measures

Dependent variables

To measure whether respondents search online for information about a job and whether they have applied for a job online (RQ1), we rely on these two yes-or-no questions: 'Do

you ever look online for information about a job?' and 'Do you ever apply for a job online?'. To measure whether social media users turn to social media for job-seeking purposes (RQ2), we rely on these yes-or-no questions: 'Thinking about social media sites like Facebook, Twitter or LinkedIn, have you ever used social media to look for or research a job?' and 'Have you ever applied for a job that you found out about on social media?'.

Independent variables

Sociodemographics. We coded gender as a binary variable, where 1 = female and 0 = male, the only two options offered on the survey. Age was asked in years. For education, we recoded the data into three categories: high school degree or less, some college, and college degree or more. Income was reported in nine categories ranging from less than $10,000 per year to more than $150,000, which we recoded into a continuous variable using the category midpoint values (range: $5000–$175,000). Two questions were asked regarding the respondent's race and ethnicity. The first one asked whether the respondent is of Hispanic or Latino origin or descent, and the second asked the respondent's race with the following categories: White, Black or African American, Asian or Pacific Islander, Native American / American Indian, mixed race, and 'other'. Using these, we created mutually exclusive categories for race and ethnicity, resulting in dummy variables for Hispanic, White, African American, Asian-American and Native American. As it would lead to uninterpretable data, we did not include respondents who selected the options mixed race or 'other' and did not indicate that they are of Latino or Hispanic origin. Work status was measured by asking respondents if they were employed full-time, employed part-time, retired, or not employed for pay (with self-employed, disabled, student, and other as possible volunteered categories). We excluded people who indicated that they were retired or disabled from the sample to restrict our analyses to those in the labor force. We then recoded those who are employed full-time, part-time, and self-employed into a dummy variable that reflects being employed (1 vs. 0 for all others).

Internet experiences. Internet experiences are assessed by the frequency of Internet use and autonomy of use. Frequency of use was measured by asking respondents how often they used the Internet. The answer options included 'almost constantly,' 'several times a day,' 'about once a day,' 'several times a week,' and 'less often than once a week.' We created a binary variable by collapsing the first three categories to reflect daily use of Internet (1 vs. 0 otherwise). Given the many realms of life where Internet use is relevant now, not using it daily is itself a signal of a different level of Internet use that is worth capturing as such. Autonomy of use was measured by asking respondents if they subscribe to the Internet at home (yes = 1, no = 0) or on a mobile device (yes = 1, no = 0). We created a dummy variable that reflects having access to the Internet both at home and a mobile device (1 vs. 0 otherwise), as access at different locations increases the flexibility of use (Hassani, 2006).

Social media use. The Pew survey split the sample in half and asked a different yes-or-no question from the two halves of the sample regarding social media use (for Pew's own methodological testing purposes). Half of the respondents was asked: 'Do you ever use a social networking site like Facebook, Twitter or LinkedIn?' and the other half was

asked: 'Do you ever use social media?' We coded both to represent social media use (1) versus non-use (0).

Digital job-search skills. To explore participants' skills regarding online job-search-related tasks, the survey asked:

> These days, many resources for job seekers are posted online and employers often expect applicants to find and apply for jobs using the Internet, email, or mobile apps. If you needed to look for a new job, how easy would it be for you to [insert items, randomize] if you needed to do so?

Respondents were then asked to consider the following actions: (a) create a professional resume; (b) use email to contact and follow up with potential employers; (c) go online to find a list of available jobs in your area; (d) fill out a job application online; (e) use a social media profile or personal website to highlight your employment skills; and (f) go online to look up services and programs that are available to help job seekers. Response options for each were: 'not at all easy,' 'not too easy,' 'somewhat easy,' 'very easy.' We recoded these to reflect a minimum score of zero and a maximum of three for each option, and created a sum score with possible range from 0 to 18, with higher scores indicating higher digital job-search skills.

The sample

About half of the sample is female (48.7%), and the average participant age is 41.2 (SD = 14.3). The majority has Internet access at home (86.1%) and on a mobile device (92.7%),

Table 1. Sample descriptives.

	Percent / M (SD)
Female	48.7
Age	41.2 (14.3)
Race and ethnicity	
White	68.1
African American	12.2
Hispanic	15.1
Asian American	3.7
Native American	0.9
Education level	
High school graduate or less	25.9
Attended some college	27.1
College graduate or higher	47.0
Income (in US$ thousands)	71.7 (51.8)
Employment status	
Employed full-time	65.9
Employed part-time	16.6
Not employed for pay	14.5
Have own business/self-employed	1.8
Student	0.4
Other	0.8
Autonomy of use (home and mobile Internet access)	80.2
Internet access at home	86.1
Internet access on a mobile device	92.7
Frequent use of Internet (daily)	89.7
Uses social media	79.9

N = 1000. M = Mean, SD = Standard Deviation.

with 98.6% having Internet access either at home or on a mobile device and with 80.2% of respondents having both types of access. Finally, 89.7% of respondents use the Internet daily. Table 1 presents descriptive statistics of the sample.

Analytical strategy

We ran logistic regression analyses to examine which factors determine who goes online to look for information about a job (RQ1a), to apply for a job online (RQ1b), who uses social media to look for or research a job (RQ2a), to apply for a job via social media (RQ2b), and how job-search skills relate to these online job-search behaviors (RQ3). All analyses started with a baseline model of sociodemographic variables (Model 1). Next, we added Internet experiences (Model 2) and digital job-search skills to the model (Model 3). In the regression analyses, we use the log of income recognizing that there are diminishing returns to higher values. Although the digital job-search skills variable has a negatively skewed distribution, we include it in our analyses as is, since the transformed version of the variable with a cubed score (Piercy & Lee, 2019) does not lead to different results. We present the pairwise correlations among the variables included in our analyses in Table 2.

Results

Prevalence of online job-search activities

Over seventy percent of respondents indicated having looked for information about a job online (72.0%). Over sixty percent (62.3%) of the respondents reported having applied for a job online at least once in their career. As for job-search activities through social media, the results suggest that among social media users (79.9% of the sample), about one-third (38.8%) had looked on such platforms for information about a job. Just over one-fifth of social media users (22.9%, or 18.3% of the full sample) had ever applied for a job that they found through social media.

Regarding digital job-search skills, the majority found most online job-search-related tasks very easy to perform. A large majority found it very easy to use email to contact and follow up with potential employers (77.2%), fill out a job application online (71.9%), find available jobs in their area online (69.2%), and go online to look up services and programs that are available to help job seekers (64.8%). Over sixty percent of respondents could create a professional resume very easily (61.5%). The one exception concerned the use of social media or a personal website to present their employment skills, which only over half (51.5%) indicated as very easy. As Table 3 shows, the sample included respondents with varying levels of job-search skills ($M = 15.1$, $SD = 3.7$, range 0–18).

Differences in autonomy of use and skills

Before addressing our research questions, it is important to establish who is more likely to have higher autonomy of Internet use and what explains variation in digital job-search skills. It is beyond the scope of this paper to give details about these analyses, but we report the major findings here. Women, younger individuals, and those with higher

Table 2. Intervariable correlations.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
(1) Female	–													
(2) Age	0.06*	–												
(3) African American	0.01	−0.02	–											
(4) Hispanic	−0.03	−0.19***	−0.16***	–										
(5) Asian American	0.02	−0.11***	−0.07*	−0.08**	–									
(6) Native American	0.01	0.01	−0.04	−0.04	−0.02	–								
(7) HS graduate or less	−0.08*	−0.19***	0.04	0.26***	−0.04	v0.01	–							
(8) Some college	0.07*	−0.02	0.01	−0.02	−0.02	−0.01	−0.36***	–						
(9) Income (logged)	−0.10**	0.25***	−0.14***	−0.25***	0.03	0.03	−0.37***	−0.04	–					
(10) Employed	−0.18***	0.14***	−0.06	−0.12***	−0.02	0.01	−0.22***	−0.02	0.29***	–				
(11) Autonomy of use	0.04	−0.08**	−0.06	−0.07*	0.04	−0.01	−0.20***	0.00	0.25***	0.06	–			
(12) Uses social media	0.06*	−0.21***	−0.04	0.02	0.02	−0.01	−0.05	−0.01	0.01	0.02	0.21***	–		
(13) Frequent use of Internet (daily)	0.00	−0.15***	−0.08**	−0.15***	0.01	0.03	−0.21***	0.02	0.23***	0.10**	0.29***	0.26***	–	
(14) Digital job-search skills	0.04	−0.13***	0.07*	−0.24***	−0.02	0.01	−0.26***	0.00	0.30***	0.12***	0.27***	0.25**	0.32***	–

*$p < 0.05$, **$p < .01$, ***$p < .001$.

Table 3. Digital job-search skills.

	Mean	*SD*
If you needed to look for a new job, how easy would it be for you to … (0–3)		
Use email to contact and follow up with potential employers	2.66	0.72
Fill out a job application online	2.59	0.76
Go online to find a list of available jobs in your area	2.58	0.73
Go online to look up services and programs that are available to help job seekers	2.56	0.70
Create a professional resume	2.44	0.81
Use a social media profile or personal website to highlight your employment skills	2.26	0.92
Sum score (0–18)	15.09	3.70

N = 1000. *SD* = Standard Deviation.

education and income are more likely to have access to the Internet both at home and on a mobile device. For digital job-search skills, the results show that younger individuals, social media users, and those with higher education and income are more likely to have higher skills. Internet use frequency and autonomy of use also positively associate with digital job-search skills. Regarding race and ethnicity, African Americans are more likely to have higher job-search skills compared to whites, while Hispanics and Asian Americans are less likely to be skilled compared to whites.

Who engages in online job searching?

The first research question asks who goes online to look for information about a job (RQ1a). Results (Table 4) show that older age and higher income are negatively related to it while education is positively related. Furthermore, African Americans are more likely to go online to look for information about a job than whites. Those with lower levels of education are less likely to do so, as well as those at higher income levels. When adding Internet experiences to the model, we find that social media use and daily Internet use are positively related to looking for information about a job online.

The next research question asks who applies for a job online (RQ1b). The results (Table 4) show that age and income are negatively related to this task. Lower education is associated with lower likelihood of applying for a job online. African American respondents are more likely to have done this than whites. We then add Internet use-related variables finding that social media use and daily Internet use are positively related to applying for a job online.

Who searches for jobs on social media?

The second research question asks among social media users, who uses social media to look for or research a job (RQ2a). The logistic regression model (Table 5) shows that age is negatively related to this outcome, and those with lower education are less likely to use social media for this purpose. People's Internet experiences do not explain who uses social media to look for a job.

The next question asks who applies for a job found through social media (RQ2b). Younger respondents are more likely to have done this than older respondents as are Asian Americans (Table 5). Respondents who have attended some college but without a degree are less likely to apply for a job found through social media than those with a

Table 4. Logistic regression on online job searching.

	Going online to look for information about a job						Applying for a job online					
	Model 1		Model 2		Model 3		Model 1		Model 2		Model 3	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Female	0.17	0.16	0.09	0.16	0.05	0.17	0.09	0.15	0.03	0.15	0.01	0.15
Age	−0.05***	0.01	−0.04***	0.01	−0.04***	0.01	−0.06***	0.01	−0.06***	0.01	−0.05***	0.01
Race (base: White)												
African American	0.83**	0.28	1.10***	0.30	0.97**	0.31	0.90***	0.26	1.06***	0.27	0.95***	0.27
Hispanic	−0.30	0.23	−0.17	0.24	−0.03	0.25	−0.35	0.22	−0.28	0.22	−0.12	0.23
Asian American	0.72	0.56	0.94	0.58	1.18	0.60	−0.35	0.39	−0.26	0.40	−0.12	0.41
Native American	0.42	0.83	0.32	0.82	0.40	0.85	0.34	0.74	0.29	0.74	0.34	0.76
Education (base: college graduate and more)												
HS graduate or less	−1.13***	0.22	−0.96***	0.22	−0.83***	0.23	−0.93***	0.21	−0.80***	0.21	−0.68**	0.21
Some college	−0.55**	0.19	−0.49*	0.20	−0.44*	0.20	−0.50**	0.18	−0.47**	0.18	−0.43*	0.18
Income (logged)	−0.20*	0.10	−0.35**	0.11	−0.49***	0.11	−0.20*	0.09	−0.29**	0.10	−0.39***	0.10
Employed	0.06	0.23	0.00	0.24	0.00	0.24	0.27	0.21	0.23	0.22	0.21	0.22
Internet Experiences												
Autonomy of use			0.13	0.21	0.02	0.21			0.06	0.20	−0.03	0.20
Uses social media			0.61**	0.19	0.45*	0.20			0.49**	0.19	0.35	0.19
Frequent use of Internet (daily)			1.40***	0.27	1.30***	0.28			0.92**	0.27	0.82**	0.27
Digital job-search skills					0.12***	0.02					0.10***	0.02
Constant	5.77***	1.13	5.14***	1.19	4.84***	1.22	5.47***	1.05	4.78***	1.08	4.42***	1.10
Likelihood Ratio Chi-square (df)	138.10*** (10)		189.88*** (13)		214.56*** (14)		176.99*** (10)		202.79*** (13)		222.08*** (14)	
McFadden's Pseudo R^2	0.12		0.16		0.18		0.13		0.15		0.17	

$N = 1000$. *$p < 0.05$, **$p < .01$, ***$p < .001$.

Table 5. Logistic regression on using social media for job searching.

	Using social media to look for or research a job						Applying for a job found through social media					
	Model 1		Model 2		Model 3		Model 1		Model 2		Model 3	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Female	−0.14	0.15	−0.15	0.15	−0.19	0.16	0.03	0.18	0.02	0.18	−0.01	0.18
Age	−0.02**	0.01	−0.02**	0.01	−0.01*	0.01	−0.03***	0.01	−0.03***	0.01	−0.02**	0.01
Race (base: White)												
African American	0.30	0.23	0.34	0.24	0.26	0.24	0.48	0.26	0.50	0.26	0.44	0.26
Hispanic	−0.09	0.23	−0.05	0.23	0.11	0.24	0.04	0.25	0.06	0.26	0.17	0.26
Asian American	0.73	0.39	0.75	0.39	0.84*	0.39	0.90*	0.39	0.90*	0.39	0.97*	0.39
Native American	−0.38	0.85	−0.37	0.85	−0.46	0.85	−0.30	1.10	−0.29	1.10	−0.37	1.10
Education (base: college graduate and more)												
HS graduate or less	−0.80***	0.21	−0.75**	0.22	−0.66**	0.22	−0.48*	0.24	−0.45	0.24	−0.39	0.25
Some college	−0.38*	0.18	−0.38*	0.18	−0.35	0.19	−0.51*	0.22	−0.51*	0.22	−0.50*	0.22
Income (logged)	−0.06	0.09	−0.10	0.09	−0.18	0.09	−0.18	0.10	−0.19	0.10	−0.25*	0.10
Employed	−0.09	0.22	−0.10	0.22	−0.15	0.22	−0.25	0.24	−0.25	0.24	−0.29	0.24
Internet Experiences												
Autonomy of use			0.18	0.23	0.04	0.23			0.09	0.26	−0.01	0.27
Frequent use of Internet (daily)			0.54	0.37	0.38	0.38			0.22	0.40	0.11	0.41
Digital job-search skills					0.12***	0.03					0.08*	0.03
Constant	1.37	0.99	1.01	1.02	0.15	1.06	2.05	1.10	1.90	1.13	1.28	1.17
Likelihood Ratio Chi-square (df)	35.18*** (10)		38.54*** (12)		54.32*** (13)		40.84*** (10)		41.33*** (12)		47.21*** (13)	
McFadden's Pseudo R^2	0.03		0.04		0.05		0.05		0.05		0.06	

$N = 799$. *$p < .05$, **$p < .01$, ***$p < .001$.

college degree. When we add Internet experiences, we do not find a significant relationship for people's Internet access types or their time spent online.

How are digital job-search skills related to online job searching?

The third research question asks whether digital job-search skills, besides sociodemographics and Internet experiences, relate to looking and applying for jobs online, as well as using social media for these purposes. After adding digital job-search skills to the models, the results show that digital job-search skills are positively related to engaging in these activities (both Tables 4 and 5: Model 3). Most of the previously significant variables remain significant. Income, which was previously unrelated to the outcome variables of interest regarding social media job searching now shows a significant negative relationship to applying for a job via social media. Being Asian American becomes positively related to social media job searching.

Discussion

This study contributes to research on digital inequality and on Internet use in the job-search process by examining who is more likely to utilize online tools, including social media, to look and apply for jobs. Sociodemographic factors such as age, race, education, and income are important factors in explaining who searches for jobs online in line with digital inequality scholarship suggesting differentiated online experiences by user background. Moreover, the results show that digital job-search skills play an important role in explaining who uses the Internet and social media to look and apply for jobs, suggesting inequality in who can take advantage of the Internet for professional and financial purposes.

Regarding racial background, we find that African Americans and Asian Americans engage in some online job-search-related activities more than whites. These findings are in line with prior studies also showing that racial minorities are more likely to turn to online resources in the job-search process (Kuhn & Mansour, 2014; Puckett & Hargittai, 2012; Stevenson, 2009). The use of the Internet for finding job opportunities might be appealing to racial minorities as online interactions may mitigate discrimination they face in in-person settings. Online tools may also increase such people's chances of discovering opportunities that they might not find otherwise, e.g., through their immediate social networks. Our results, however, also reveal that although African Americans are more likely to engage in online job searching, this is not the case when it comes to utilizing social media for this purpose, and we encourage future research in this area to investigate the reasons for this.

The regression models show that lower education is associated with lower likelihood of going online to look for information about a job in general, and by using social media in particular, as well as applying for a job online, findings consistent with prior work about online job seeking more generally (Green et al., 2012). One reason may be that the types of jobs about which information is available online tend to be the types that require higher education. Professional networking sites like LinkedIn are certainly more geared to the types of positions that would be relevant for more highly-educated

individuals. When touting the potential benefits of online job search, it is important to remember that such potential is much more likely for those in fields and careers that are associated with higher education.

Higher income is negatively related to engaging in online job-search activities. This is in line with earlier work showing that among those who have access to the Internet, the likelihood of online job searching decreases for employed job seekers having higher income (Stevenson, 2009). For those already in a more privileged position, different recruitment strategies such as networking and internal recruitment might play a bigger role. Additionally, such people may not be as reliant on actively seeking out opportunities rather than having recruiters contact them.

Past research has shown that understanding the job-search process, as well as perceived usefulness and perceived ease of use of technologies, relate to self-efficacy with job searching, which predicts job-search intentions and behavior (Fetherston et al., 2018; Lin, 2010; Saks et al., 2015). Our results show that Internet use frequency and autonomy of use positively associate with digital job-search skills, which plays a role in users' online job-search behaviors, including the use of social media for this purpose. Although earlier research has drawn attention to the potential effects of digital job-search skills on using social media for job seeking through interview methods (Manroop & Richardson, 2013), our study has been able to demonstrate this connection quantitatively thanks to a national survey. In light of these results, increasing Internet access points and initiatives offering online job-search-related training may be helpful for job seekers, and studying their effectiveness on job-search outcomes could be an important direction for future research.

The results of this study should be considered in light of some limitations. The analyses are based on cross-sectional data and thus we are unable to draw any causal conclusions. Moreover, we do not have data about the outcomes of online job searching, so we are unable to comment on whether using the Internet for job search has tangible benefits or whether those are distributed differently by user background. A wider research strategy including questions on both digital skills and online job-search outcomes could be used to explore the role digital inequalities play in job attainment. Still, this study gives insight into how sociodemographics and digital job-search skills relate to various online job-search activities. It is also important to highlight the fact that the data we used are based on a respondent pool from the United States. Job-searching processes might differ across countries and cultures, and therefore, similar analyses on different data from other countries might lead to different conclusions. Likewise, labor-force demographics, and Internet access and use vary across countries as well, and thus it is important to consider carefully the generalizability to other national contexts. Furthermore, this study did not distinguish job-search activities for different occupational sectors. While Internet use and e-recruitment are crucial for some sectors (e.g., IT outsourcing, freelancing) it might not be as central to others (e.g., blue-collar jobs), calling attention to the need of determining the skills and strategies for successful job searching by taking into account the biases and inequalities embedded in different workforce structures (Gist-Mackey, 2018). Accordingly, future research may want to examine job-search behaviors and the role of job-search competencies by job sector.

Conclusion

Drawing on a national survey of Americans' experiences with using the Internet and social media in the job-search process, this study makes a contribution to the digital inequality literature and research on online job searching by considering digital job-search skills in the process. We find that digital job-search skills are strongly correlated with using the Internet and social media for job searching. While there is research that has linked Internet skills and employment-related issues (Hargittai & Litt, 2013), this work has focused on online self-presentation and not the job-search process. Other research suggesting a positive relationship between perceived use of technologies to online job searching has focused on the use of platforms (e.g., LinkedIn, (Fetherston et al., 2018)) rather than specific actions related to online job searching as we did in this study. Given that the use of digital tools for job searching in today's labor market is increasingly common, it is important to realize that some Americans find it difficult to perform various basic online job-search tasks. Recognizing that these inequalities tend to disadvantage people already in less privileged positions, i.e., the less educated, is imperative to any initiatives that look to online job searching as a way to level the labor-force playing field.

Disclosure statement

No potential conflict of interest was reported by the author(s). The Pew Research Center bears no responsibility for the analyses or interpretations of the data presented here. The opinions expressed herein, including any implications for policy, are those of the authors and not of the Pew Research Center.

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